IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Seiro YAHATA et al.

Serial Number: **08/701,457** 

August 22, 1996

Group Art Unit: 2821

TECHNOLOGY CENTER

Examiner: M. Wimer

Filed:

ANTENNA FOR TRANSPONDER AND TRANSPONDER

REQUEST FOR RECONSIDERATION UNDER 37 CFR §1.111

Commissioner for Patents Washington, D.C. 20231

September 13, 2001

Sir:

In response to the Office Action dated March 13, 2001, extended to September 13, 2001 by a three (3) month Petition for Extension of Time, Applicants respectfully request reconsideration of the following prior art rejections:

- 1. Claims 1-5, 8-11, 19-29 and 36 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 5,408,243 to D'Hont (hereinafter "<u>D'Hont</u>") in view of U.S. Patent 3,031,667 to Wennerberg (hereinafter "<u>Wennerberg</u>"), U.S. Patent 3,495,264 to Spears (hereinafter "<u>Spears</u>"), or U.S. Patent 3,750,180 to Fujimoto et al. (hereinafter "<u>Fujimoto et al.</u>").
- 2. Claims 12, 14, 15, 17 and 18 stand rejected under 35 USC §103(a) as unpatentable over U.S. Patent 4,937,586 to Stevens et al. (hereinafter "<u>Stevens et al.</u>") in view of U.S. Patent 4,879,570 to Takizawa et al. (hereinafter "<u>Takizawa et al.</u>") and <u>D'Hont</u>.
- 3. Claims 32-35 stand rejected under 35 USC §103(a) as unpatentable <u>**D'Hont**</u> in view of <u>Stevens et al.</u> and <u>Takizawa et al.</u>

## U.S. Patent Application Serial No. 08/701,457

Claims 1 and 19 stand rejected under 35 USC §103(a) as unpatentable over **Wennerberg** in view of **D'Hont**.

<u>**D'Hont**</u> discloses a flat, flexible antenna to be incorporated into a badge or similar object. Fig. 6 shows a coil 38 spirally wound on a strip of wires 36. Fig. 7 shows the wires being formed into several separate stacks of flat strips 42, 44, 46 and 48.

Wennerberg discloses a magnetic antenna apparatus having a solid ferrite core and a set of windings 11 parallel to the shorter rectangular dimension of the solid ferrite core and a set of windings 12 parallel to the longer rectangular dimension of the solid ferrite core.

<u>Spears</u> discloses a loop antenna coil 22 wrapped around the longer dimension of a closed rectangularly-shaped magnetic core loop.

**Fujimoto**, et al. discloses a magnetic antenna using a solid magnetic core with two square-shaped apertures 8,8'. A "pumping coil 12" is wound on the part of the core between apertures 8 and 8'.

The several stacks of flat strips 42, 44, 46, and 48 in the magnetic core of **D'Hont** teaches away from the present invention in which there is only a single stack of rectangular thin plates, as recited in claim 1 of the present invention.

Furthermore, <u>D'Hont</u> fails to teach, mention or suggest any relationship of the orientation of the coil and the dimensions of the rectangular flat plates forming the core, as recited in claims 1 and 19.

None of the other cited references teaches, mentions, or suggests that the magnetic core

## U.S. Patent Application Serial No. 08/701,457

consists of a single stack of flat plates, as recited in claims 1 and 19.

Stevens, et al. discloses a radio broadcast communication system with multiple loop antennas, specifically a loop air core antenna 46 having an axis perpendicular to ferrite core antenna 48.

<u>Takizawa, et al.</u> discloses a broadcasting wave reception antenna have a magnetic core having multiple radial projections extending on a common plane, and respective projections are provided with coils wound on them.

None of the references teaches, mentions or suggests, three antennas having mutually perpendicular axes, as recited in claims 12 and 32.

Despite the Examiner's arguments to the contrary, the combination of the cited references teaches only <u>pairs</u> of antennas having mutually perpendicular axes, and cannot be said to teach, mention, or suggest any arrangement of <u>three</u> (3) antennas having mutually perpendicular axes, as recited in claims 12 and 32.

Thus, the 35 USC §103(a) rejections should be withdrawn.

In view of the aforementioned remarks, claims 1-5, 8-12, 14, 15, 17-29 and 31-36 are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees which may be due

## U.S. Patent Application Serial No. 08/701,457

with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN, HATTORI, McLELAND & NAUGHTON, LLP

Willin I Buch

William L. Brooks Attorney for Applicants

Reg. No. 34,129

Atty. Docket No. 960630

Suite 1000

1725 K Street, N.W.

Washington, D.C. 20006

Tel: (202) 659-2930

WLB:mla

Enclosures: Petition for Extension of Time

H:\HOME\letitia\WLB\96\960630\req for recon